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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/006,777	01/14/1998	CHRIS L. HOOGENBOOM	100-010	4131

35114 7590 11/26/2003

ALCATEL INTERNETWORKING SYSTEM, INC.  
ALCATEL-INTELLECTUAL PROPERTY DEPARTMENT  
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PLANO, TX 75075

EXAMINER

GEORGE, KEITH M

ART UNIT	PAPER NUMBER
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2663

24

DATE MAILED: 11/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/006,777

Applicant(s)

HOOGENBOOM ET AL.

Examiner

Keith M. George

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 23-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### DETAILED ACTION

1. This application has been reassigned to examiner Keith George, AU 2663.
2. The indicated allowability of claims 23-32 is withdrawn in view of the newly discovered reference(s) to Hayter et al., U.S. Patent 5,448,559, hereinafter Hayter. Rejections based on the newly cited reference(s) follow. The examiner apologizes for the additional delay this will cause to the application.

#### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 23-26 and 28-30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hayter.
5. Referring to claim 23, Hayter teaches an ATM communication system having a plurality of input ports and a plurality of output ports, each of the input ports being fed from an input port server and each of the output ports being arranged to feed an output port server. The input port servers each have a plurality of buffer stores (data stores) (figure 4, 28, 29, 30), one for each of the output ports (output ports associated with the plurality of data stores) to which output port data is transmitted through the switch. Each buffer store in the input port servers is arranged to interrogate the output port server with which it communicates by a bandwidth request

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("Requests") before the transmission of data (using the allocation units (input and output control) 31 and 37 in figure 4). This determines whether output port server data handling capacity is available, whereby ATM switch operation (switch fabric for switching data for any of the input ports to any of the output ports) during periods of peak traffic is facilitated. The system includes a queuing arrangement (data stores are arranged to buffer data units) for bandwidth requests received during periods when there is no available bandwidth capacity, the arrangement being such that requests are released in a predetermined order when capacity becomes available (abstract and figures 1 and 4). Hayter goes on to teach that the mechanism for handling a bandwidth request in figure 2 where it is taught that upon receipt of a bandwidth request ("Request"), a comparison is made in a comparator with the available bandwidth as stored in a bandwidth allocation table that is representative of storage portions (figure 1, 11, 12, 13) (monitor the backlog of buffered data units for delivery to their associated output ports). If bandwidth is available, a positive acknowledgement is sent, if bandwidth is not available, the request is rejected and a negative acknowledgement is sent (if the backlog reaches a particular level, enforce a rate limitation against additional data units for delivery) (column 3, line 67 - column 4, line 12). It is clear that Hayter is teaching a system that will allow for an input port to request available bandwidth from an output port. The system also includes a queuing arrangement for bandwidth requests received during periods when there is no available bandwidth; requests are then released in a predetermined order (additional data units in violation of the rate limitation are filtered) (column 2, lines 61-68).

6. Referring to claims 24-26, Hayter teaches the switch described in reference to claim 23 above and also teaches that the system further comprises a priority releasing system for queued

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requests determined in dependence upon character of data appertaining to each queued request (column 6, lines 50-53).

7. Referring to claims 28-30, Hayter teaches the switch described in reference to claim 23 above and also clearly teaches that if sufficient bandwidth is available, a signal is sent to provide a positive acknowledgement from a bandwidth allocator to update the bandwidth allocation table. If sufficient bandwidth is not available to meet the request, a signal is sent which rejects the request and a negative acknowledgement signal is provided (column 4, lines 4-12).

***Claim Rejections - 35 USC § 103***

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 27, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayter as applied to claim 23 above, and further in view of Hluchyj et al., U.S. Patent 5,497,375, hereinafter Hluchyj.

10. Referring to claims 27 and 31, Hayter teaches the switch described in reference to claim 23 above with the possible exception of using a "leaky bucket" algorithm to determine data units with a relatively low priority. Hluchyj teaches a device and method for ATM end system cell flow regulation including having a cell pass though a leaky bucket monitor to determine if it is violation of the traffic parameters negotiated during the call set-up. The cell header is set to 1 if the leaky bucket state is set to violate and set to 0 if the leaky bucket state is set to normal (column 3, lines 17-22). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to utilize the leaky bucket teachings of Hluchyj as used in an

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ATM cell flow regulation with the teaching of Hayter. One of ordinary skill in the art would have been motivated to do this to monitor a sustainable cell rate and an associated burst tolerance for each connection (Hluchyj, column 3, lines 11-12).

11. Referring to claim 32, Hayter and Hluchyj teach the switch as described in reference to claims 27 and 31 above and Hayter has already been shown to clearly teach that if bandwidth is not available to meet the request; a signal is sent which rejects the request and a negative acknowledgement signal is provided (column 4, lines 8-12). It should also be noted that Hayter teaches that during periods when there is no available capacity, the arrangement being such that requests are released in a predetermined order when capacity becomes available (column 2, lines 61-67)..

#### ***Response to Arguments***

12. Applicant's arguments with respect to claims 23-32 have been considered but are moot in view of the new ground(s) of rejection.

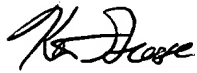
#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith M. George whose telephone number is 703-305-6531. The examiner can normally be reached on M-Th 7:00-4:30, every other F 7:00-3:30.

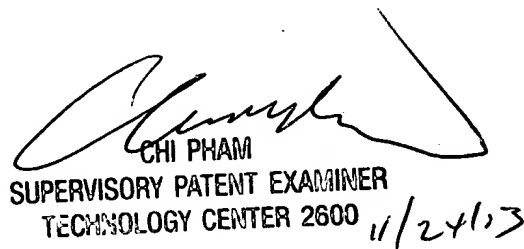
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 703-308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.



Keith M. George  
19 November 2003



CHI PHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600 11/24/03